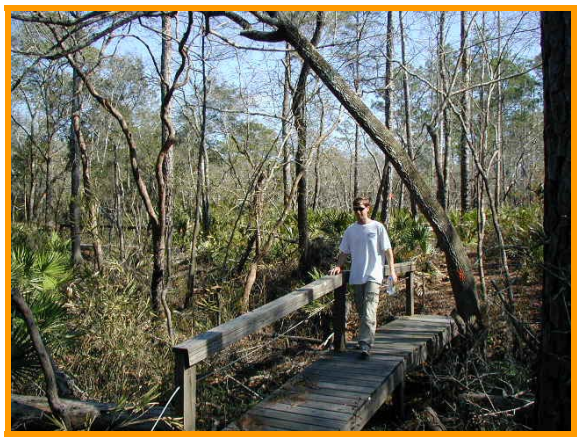
Florida National Scenic Trail Visitor Assessment:



Annual Report 2003-2004

Year One

Presented to:

United States Forest Service

Florida Trail Association

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Executive Summary

This report describes the Florida National Scenic Trail Visitor Assessment conducted by the University of Florida School of Forest Resources and Conservation. The purpose of this study is to determine reliable use estimates of the FNST. Overall, twenty-seven identified survey sites will be assessed over a five-year period. Specifically, this report discusses the results of the first study year.

Study Year One

Three methods were used to collect data at eight survey sites:

1. Personal observations of visitors to the FNST through a stratified random sampling framework,
2. Mechanical pedestrian counters installed along FNST in survey sites, and
3. Supplemental materials like registration cards and visitor logs.

Summer Season: June 01 - September 31

- 23, 6-hour survey blocks of personal observation completed at eight survey sites
- Four mechanical counters installed and pilot tested, two of these were vandalized
- Two visitor questionnaires developed and pilot tested

Fall/Spring Season: October 01 – May 31

- 116, 3-hour survey blocks of personal observations completed
- Eleven additional mechanical counters installed along FNST and calibrated once a month
- Visitor questionnaires distributed at all eight sites

Year One 2003-2004 Use Estimates

Pedestrians: 173,138
All Users[1]: 244,901

Who are they?

Mostly white males, 50 years or older. A large percent have a college education, are married, have a household income of $50,000 or above and have no children living at home. They visit the trail alone or with their family, and hike, on average, 3-5 miles.

Why are they coming?
(Top 3 Most Important Motivations)

1. Enjoy nature
2. Promote physical fitness
3. Escape noise and crowds

[1] = includes non-pedestrians (bikes, etc)

Introduction

Background

There is a need for government agencies to consistently collect long-term recreation use data (Loomis, 2000). Access to accurate and reliable information about the number and type of visitors using recreation opportunities on public natural areas is an important way for land management agencies to assess the impacts of visitors, prioritize research and funding efforts, identify and provide for visitor and community benefits, and communicate resource needs to policy makers (Lynch, Vogt, Cindrity, & Nelson, 2002; Mowen, 2002). However, obtaining accurate visitor numbers is often a difficult and time-consuming endeavor. There are a number of ways to collect visitor use information. The type of mechanisms used to count and the frequency of collection depend largely on the resources (e.g., staff, money) available, as well as the study objectives. Due to the difficulty in obtaining accurate visitor counts, management agencies often rely on observational counts or "best guesses" to estimate the amount of recreation use.

Like other long-distance trails and dispersed recreation activities, the Florida National Scenic Trail (FNST) faces numerous obstacles to obtaining accurate visitor numbers. Currently, no systematic means of collecting visitor use information exists. The amount and type of visitor use data collected varies between the different management agencies as well as within the volunteer efforts. Furthermore, there is no protocol in place for handling collected data.

To help develop an approach to collecting visitor use data, researchers from the School of Forest Resources and Conservation at the University of Florida are working with the U.S. Forest Service (USFS) and the Florida Trail Association (FTA) to initiate a visitor assessment of the Florida National Scenic Trail. To begin the assessment, researchers conducted a thorough literature review of methods for monitoring visitor use for dispersed recreation. Researchers also worked with all relevant management agencies along the FNST to ascertain the extent of their monitoring efforts.

Number of Users of the FNST

Past estimates of FNST visitation have ranged from 200,000 to 250,000. This wide range reflects some of the variables related to counting visitors on the FNST. Currently, there is no way to separate many of the uses that occur. For example, Gulf Islands National Seashore received 2,450,528 visitors to the Fort Pickens and Santa Rosa recreation areas in FY 2001. Due to the location of the FNST, the majority of those visitors probably walked on the FNST, but we currently have no way of knowing *exactly* what percent of these people are hiking on the FNST.. Working with the USFS and FTA staff, we are using multiple techniques to develop the best estimate possible of FNST users.

Study Objectives

The purpose of the FNST Visitor Assessment is to generate reliable estimates of visits to the FNST. A visit is defined as one person entering and exiting the FNST. Although all visitors will be reported, the focus of this study is foot traffic (i.e. hiking, walking, backpacking, running, etc.).

For each year, there are two major study objectives:

1. To generate reliable use estimates of each survey site, which can be inferred to all FNST survey sections to create a trail-wide use estimate, and
2. To describe hikers in terms of their socio-demographic and trip characteristics, as well as their level of satisfaction.

Methodology

Survey Sections

The Florida National Scenic Trail is composed of 42 sections. Using these 42 sections as a foundation for survey efforts, UF researchers identified areas within each section that would be likely serve as exit and/or entrance points for hikers. These areas tended to correspond closely to public lands with established trailheads, which attract more hikers and serve as efficient survey sites. Researchers identified 27 survey sites for data collection, and preliminary research categorized these sites as receiving high, medium, or low use (Appendix I). Each survey site is further divided into potential FNST access points. While data may not be collected at every access point within a site, every access point is classified by use type. This classification allows data collected at similar access points to be inferred to access points without data (Appendix XIV). Survey sites were geographically divided into groups, and each group will be sampled for one year during the five-year visitor assessment (Appendix II). Visitor use estimates generated for high, medium, and low use sites surveyed each year will be used to help generate an estimate of overall FNST visits each year.

Counting FNST Visitors

When

In a 2002 survey of FTA section leaders and agency land managers, the summer months were identified as the period of lowest visitor use, while the fall/spring months were identified as the overall high use period. Therefore, the study year will be broken up into two survey seasons:

- Summer Season: June 1st to September 31st
- Fall/Spring Season: October 1st to May 31st

The use of two survey seasons allows researchers to account for seasonal differences in use, work with smaller time increments, and make any necessary modifications to the sampling framework.

Where

Researchers collected data from eight survey sites during year one:

1. Gulf Islands National Seashore
   -including Pensacola Beach
2. Eglin Air Force Base
3. Apalachicola National Forest
4. Osceola National Forest
5. Goldhead Branch State Park
6. Etoniah Creek State Forest
7. Little Big Econ State Forest
   -including Cross-Seminole Trail
8. Ocala National Forest

Table 1. Allocation of Survey Periods.

	Summer Season	Fall/Spring Season
High	2 weekends 1 weekday	8 weekends 2 weekdays
Medium	2 weekends 1 weekday	4 weekends 1 weekday
Low	1 weekend 1 weekday	2 weekends 1 weekday

The eight survey sites contained a total of 30 access points (Appendix III). Although Pensacola Beach is not located within Gulf Islands National Seashore and the Cross-Seminole Trail is not located within Little Big Econ State Forest, both access points were surveyed regularly.

How

To obtain a reliable estimate of hikers on the Florida National Scenic Trail, researchers combined three different methods: personal observations, mechanical pedestrian counters, and supplemental materials (i.e., registration cards, visitor logs). The following sections describe each technique.

Personal Observation

At access points within each survey site, surveyors conduct exit surveys during designated survey periods. Surveyors used observation logs to record the total number of users entering and exiting the trail, as well as group size, gender, activity, and direction of travel (Appendix VI). This study is primarily concerned with foot traffic, but some areas of the trail are designated multi-use, and therefore activities such as biking, horseback riding, and roller-blading were also recorded.

A stratified random sampling approach was used to generate an estimate of hikers on the FNST. The sampling framework consisted of three strata:

1. Use level - high, medium, or low
2. Day type – weekdays (Monday, Tuesday, Wednesday, and Thursday) or weekends (Friday, Saturday, and Sunday)
3. Time of day – morning or afternoon survey shifts

Survey periods were allocated by use type as well as day type (Table 1). During year one, the summer season contained 23 survey periods (Appendix IV), while the fall/spring season contained a total of 116 survey periods (Appendix V).

During the summer season, every survey day contained two possible survey periods: a 6 hour morning period or a 6 hour afternoon period. The summer season was comprised of 70 weekdays, making a total of 140 possible weekday survey periods, and 52 weekend days, making a total of 104 possible weekend survey periods. First, every survey period was assigned a number. Using an Excel spreadsheet, researchers randomly selected numbers without replacement and correlated the random number to the assigned survey period. This process was used to determine survey periods for each survey site. Due to the cost and time of traveling to Gulf Islands National Seashore and Eglin Air Force Base, these two survey sites were grouped together when possible.

For the fall/spring season, the sampling framework was slightly modified. Researchers conducted restricted randomization to ensure survey periods were spread over the entire season. First, weeks were randomly chosen, and then individual days within the designated weeks were randomly chosen. The day of the week was chosen without replacement, and time periods were alternated. There are 244 days in the fall/spring season, 139 weekdays and 105 weekend days. Similar to the summer season, every designated survey day consists of six hours of observation. However, the six hours is divided into two three-hour survey blocks. This modification allows one technician to be positioned at one access point for one of two possible morning shifts and then move to another access point, within the same survey site, for one of two possible afternoon shifts. Fifty-eight survey days were completed in the fall/spring season, totaling 116 three-hour survey blocks.

Mechanical Pedestrian Counters

UF researchers used two types of counters to generate visitor use estimates: infrared eyes and pressure pads. While the installation of the two pieces of equipment differs, the data collection methods are the same. Researchers used the numbers collected from the counters to provide a reliable estimate of hikers on the FNST. The counters are calibrated monthly to help researchers develop an accurate correction factor to apply to each specific site.

Four counters were initially ordered and tested in two national forests. In May 2003, counters were installed in Apalachicola National Forest (one infrared eye) and Ocala National Forest (three pressure pads). Two of the pressure pads in Ocala National Forest were vandalized within three months of their installation.

Beginning in October 2003, eight additional pressure pads were installed throughout the current survey sites. Two of these pads were installed in Ocala National Forest to replace the vandalized pads. Three additional infrared eyes were also installed. A total of thirteen mechanical counters were put into place (Appendix VII).

Supplemental Materials

For many areas, additional information regarding visitor numbers is available. This type of information ranges from formal registration cards to informal visitor logs kept in a mailbox on a nearby kiosk. The information found in these materials helps supplement the counters and observational counts.

Registration cards can be used to obtain supplemental counts of visitors to the FNST. Visitor compliance is often an issue when depending on registration cards for visitor counts. There is currently no standardized system for registration cards on the FNST, so the reliability of this data is site dependent. For year one, researchers only used registration cards from Eglin Air Force Base for supplemental data. Registration is mandatory at this site, and there is consistency in the card's dispersal and collection.

Currently, a system is being developed to standardize registration cards along the entire FNST (Appendix IX). If successful, the cards will be dispersed and collected by Florida Trail Association volunteers, and the data will be analyzed and stored by University of Florida researchers. With increased consistency in the card's dispersal, collection, and analysis, registration cards can become an important resource in supplementing visitor counts.

Visitor Questionnaires

To learn more about hikers on the specific survey sections, researchers conducted on-site exit interviews and distributed mail-back surveys. The objective of these surveys is to describe hikers on the selected sites in terms of their hiking and socio-demographic characteristics. Researchers used an overall estimate of the total number of hikers for selected sites to identify a sample size (+/- 5% sampling error). Researchers also anticipated less than 50 percent response rate, and therefore distributed two surveys for every one survey expected to be returned at each site. The number of surveys conducted and distributed at each site was based on site use level (proportional).

Researchers developed and pilot tested two visitor questionnaires: a short on-site survey and a longer mail-back survey. Both surveys were given to willing participants over the age of 18 who were exiting the FNST. The surveys were distributed at FNST access points during the scheduled observation periods. Only pedestrians were asked to participate in the study.

While similar questions are asked in both surveys, the mail-back survey provides more in-depth information about hiking experience and behavior. The on-site survey contains 13 questions pertaining to frequency of trail use, activity, group size, trip length, trip satisfaction, and trail improvements (Appendix IX). If the participant listed hiking or walking as one of their top three activities on the FNST, he/she was asked to take home

a mail-back survey. The mail-back survey contains 6 sections pertaining to trip characteristics, hiking experience, Florida National Scenic Trail knowledge, and participant demographics (Appendix X). This year's survey also included questions on Leave No Trace Skills and Ethics.

Data Analysis

Personal Observations

The observation logs completed by researchers during sampling blocks were used to develop seasonal estimates of visitors to the FNST. For each access point within every survey site, the following counts were recorded:

- TFC = Total Foot Count. Total number of visitors that are considered foot traffic (hikers, walkers, backpackers, runners) who were observed entering or exiting the FNST.
- TOC = Total Other Count. Total number of bikers, horseback riders, rollerbladers, who were observed entering or exiting the FNST.
- TWC = Total Work Count. Total number of service workers, volunteer or agency related, who were observed entering or exiting the FNST.
- TVC = Total Visitor Count. Total number of visitors, including all activities, who were observed entering or exiting the FNST.

Average seasonal counts of TFC, TOC, and TVC were calculated for each survey site using a four-step process. While, the TWC was recorded, the data were not analyzed using this process.

1. For each variable (i.e. TFC, TOC, and TVC), researchers calculated the **average sampling period count** (am and pm) for each day type (weekend or weekday) for each access point of each survey site.

$$X_{ijkl} = 1/N_{ijk} \sum_{l=1}^{Nijk} X_{ijkl}$$

Where:
i=access point
j=survey site (1,…,8)
k=weekday (1) and weekend (2)
l=the sampling periods for each day (am or pm)
m=number of counts for sampling period *l* on day type *k* at access point *i* of site *j*
$N_{ijk\,l}$= number of times counted during shift *l* on day type *k* at access point *i of* site *j*
X_{ijklm}=the count on *m*th repetition for sampling period *l* on day type *k* at access point *i* of site *j*
X_{ijkl}=average count during sampling period *l* on day type *k* at access point *i* of site *j*

2. Second, researchers calculated the **average daily count** for each access point of each site by summing the two sampling periods (calculated above) for both weekend days and weekdays.

$$X_{ijk} = \sum_{k=1}^{3} X_{ijkl}$$

Where:
i=access point
j=survey site (1,…,8)
k=weekday (1) and weekend (2)
l=the sampling periods for each day (am or pm)
X_{ijk}=average daily count on day type *k* at access point *i* of site *j*

3. Next, the average daily counts of all access points within a site were summed to calculate the average daily count for a site for both weekdays and weekends.

$$X_{jk} = \sum_{k=1}^{3} X_{ijk}$$

Where:
i=access point
j=survey site (1,…,8)
k=weekday (1) and weekend (2)
X_{jk}=average daily count on day type *k* at site *j*

4. Researchers calculated the **average seasonal count** for each site, for variables TFC, TOC, TVC. Researchers multiplied the average daily count for weekends by the number of weekend days in that season. Then, they multiplied the average daily count for weekdays by the number of weekday days in that season. Researchers then added the two numbers to find the average seasonal count.

Seasonal Average for each site =

$$M_1\left(\sum_{i=1}^{8} X_{i1}\right) + M_2\left(\sum_{i=1}^{8} X_{i2}\right)$$

Where:

M_1 = number of weekend days in the season

M_2 = number of weekday days in the season

X_{i1} = average daily count for site *i* for weekend days.

X_{i1} = average daily count for site *i* for weekdays.

i = site (1,…, 8)

Next, the survey site estimates, for variable TFC, were grouped by use type (high, medium, and low). The average of the estimates for the high use sites medium use sites, and low use sites was determined.

Finally, for variable TFC, an estimate for all 27 survey sites was generated (Appendix I). The following equation was used:

$$E = \sum S + X_H(N_H) + X_M(N_M) + X_L(N_L)$$

Where:

E = TFC Estimate for all 27 survey sites

S = Estimates from completed survey sites

X_H = Average TFC for high use sites

X_M = Average TFC for medium use sites

X_L = Average TFC for low use sites

N_H = Number of high use survey sites not yet surveyed

N_M = Number of medium use survey sites not yet surveyed

N_L = Number of low use survey sites not yet surveyed

Due to a small number of survey periods during the summer season, steps 1 through 3 of the data analysis for the summer season differed slightly. The average daily count for each site was found by multiplying the average 6-hour sampling period by 2. All other steps remained the same.

Mechanical Pedestrian Counters

Data collected from mechanical counters provide continuous counts for selected survey sites. A five-step protocol was developed to transform raw counter data to final seasonal counts for each installed counter (Appendix XIII).

Supplemental Information

Information from registration cards collected during the season was entered into a database and analyzed to determine the following results:

- total count of foot traffic
- distribution of gender
- distribution of day use vs. overnight visits
- frequency of entry and exit points, and
- frequency of use by month.

Results and Discussion

Estimate of Summer Hikers

Personal Observations

Of the eight survey sites, Gulf Islands National Seashore received the most total visitors during the summer season (Table 2). Although Little Big Econ State Forest received less total visitors than Gulf Islands, this survey site had the highest estimate of pedestrians of all eight survey sites. Goldhead State Park, Ocala National Forest, Osceola National Forest and Apalachicola National Forest received 868 visitors combined, and 764 of these visitors were considered pedestrians using the FNST. No visitors were observed at Eglin Air Force Base or Etoniah State Forest.

Table 2. FNST summer 2003 use estimates for eight survey sites.

Use Type	Site	Foot Traffic Estimate	Other Activities Estimate	Total Visitor Estimate
High	Gulf Islands	6,480	5,696	12,176
	Little Big Econ	7,272	3,952	11,224
	Goldhead	452	52	504
	Ocala	104	52	156
Medium	Osceola	156	0	156
	ANF	52	0	52
	Eglin	0	0	0
Low	Etoniah	0	0	0

FNST Summer Estimate

The average summer estimate for first study year's high use sites was 3,577 pedestrians (Table 2). Preliminary findings identified 12 high use sites that will be surveyed over the five-year study. Therefore, the summer estimate for all identified high use sites is 42,924 pedestrians. Similarly, The average summer estimate for medium use sites is 69 pedestrians. A total of 6 medium use sites will be surveyed over the five-year study, and therefore the summer estimate for all medium use sites is 416 pedestrians. No pedestrians were seen at the low use sites making the total average pedestrian estimate 0. The summation of these estimates gives a trail-wide estimate of 43,340 pedestrians for all identified survey sites along the FNST.

Table 3. FNST summer 2003 pedestrian estimate for 27 identified sites.

Use Type	Average Foot Traffic Estimate	Number of Sites	Total Average Foot Traffic Estimate
High	3,577	12	42,924
Medium	69	6	416
Low	0	9	0
		Total	**43,340**

Estimate of Fall/Spring Hikers

Mechanical Pedestrian Counters

Of the eight sites surveyed during fall/spring 2003-2004 Little Big Econ State Forest had the most foot traffic counts (Table 4.) The average high use site count was 6,663 pedestrians. Apalachicola National Forest received the most counts of a medium use site, 1,635, while the medium use sites' average count was 887. Only one low use site was surveyed, Etoniah Creek State Forest, which was estimated to have 124 pedestrians between October and May.

FNST Fall/Spring Estimate

The total number of estimated hikers and walkers on the Florida National Scenic Trail for the fall/spring season was 129,798 (Table 5). After the total count was created for each of the current survey sites it was added to the total count average for sites that had not been surveyed. As the study continues and a true estimate is generated for each site the total number of estimated foot traffic will become more accurate.

Combined Data

The total estimated number of pedestrians using the trail from June 2003 to May 2004 is 173,138. However, the data from the summer and the data from the fall/spring were collected in two different ways. The summer data was collected through personal observation, while the fall/spring data was collected with mechanical pedestrian counters. In the future all data will be collected with mechanical counters.

Supplemental Data

Eglin Air Force Base was the only Year One site that collected registration cards. The data from the cards showed that 687 people hiked in Eglin from June 2003 to May 2004. There were 428 males, and 180 females, while 78 left no response. Though the majority were only day hikers, 82 people spent the night on the trail. SR 85 was the most visited trailhead.

Table 4. FNST fall/spring 2003-2004 pedestrian estimates for eight survey sites.

Use Type	Site	Foot Traffic Estimate
High	Little Big Econ	10,797
	Gulf Islands	8,225
	Goldhead	4,826
	Ocala	2,805
	High Use	**6,663**
Medium	ANF	1,635
	Eglin	610
	Osceola	415
	Medium Use Average	**887**
Low	Etoniah	124

Table 5. FNST fall/spring 2003-2004 pedestrian estimate for 27 identified sites

Use Type	Average Foot Traffic Estimate	Sites	Total Foot Traffic Estimate
High		Little Big Econ	10,797
		Gulf Islands	8,225
		Goldhead	4,826
		Ocala	2,805
	6,663	8 other high use	53,305
		High Use Total	**79,958**
Medium		ANF	1,635
		Eglin	610
		Osceola	415
	887	3 other med use	2,660
		Med Use Total	**5,320**
Low		Etoniah	124
	124	8 other low use	1,055
		Low Use Total	**1,179**
		Total	**129,798**

Estimate of FNST Visitors

Total FNST Users 2003-2004

Of the eight survey sites for the year, two of those sites included a multi-use trail. The trail through Gulf Islands was used by bikers, and the continuing trail through Pensacola Beach was used by bikers and rollerbladers. Similarly, the Cross Seminole Trail (included with Little Big Econ SF) was a paved multi-use trail.

Table 6. FNST fall/spring 2003-2004 trail use estimate by non-pedestrian users for 6 multi-use sites.

Multi-Use Site	Total Multi-Use Estimate
Gulf Islands	14,385
Cross Seminole	9,536
average x 4 sites	
St. Marks	47,842
Cross FL Greenway	
Withlacoochee	
Lake Okeechobee	
Total	71,763

Two survey instruments were pilot tested to gather information about visitor use on the Florida National Scenic Trail. The following results are divided into two sections: short survey results and long survey results.

Short Survey Results

The short survey was completed by 183 participants at eight recreation sites (Figure 1.) Nearly half (42.7%) of all surveys were completed at Little Big Econ State Forest. Gulf Islands National Seashore, Goldhead State Park, and Ocala National Forest made up the other half (49.7%.) The last four sites made up the remaining 7.6%.

Socio-Demographic Characteristics

The most frequent age of the short survey participants were in the 50-59 age category (32.1%.) The other age ranges were almost evenly distributed, with the lowest being ages 18-29, with 11.4% (Table 6.) There was a large difference in gender, with almost 75% (72.8%) of the short survey respondents being male (Table 7.)

The majority (85.5%) of survey participants were from Florida, though there were respondents from all over the US, as well as Canada and the United Kingdom (Table 8.)

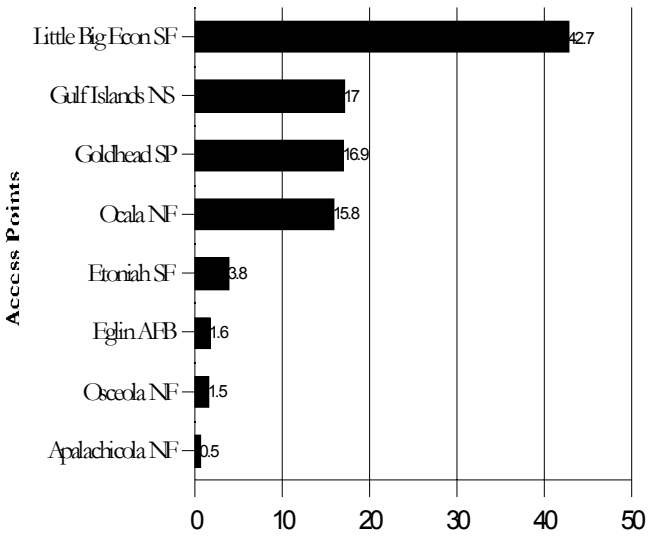

Figure 1. Distribution of Short Surveys

Table 6. Short survey respondents' age ranges

Age	Percent (%)[1]
18-29	11.4
30-39	17.1
40-49	20.7
50-59	32.1
Over 60	18.6

[1]n=140

Table 7. Short survey respondents' gender

Gender	Percent (%)[1]
Male	72.8
Female	27.2

[1]n=169

Table 8. States represented by short survey respondents.
[1]n=183

States of origin	Percent (%)[1]
Florida	85.5
Michigan, Wisconsin, Illinois, Missouri	4.5
New York, Maryland, Delaware	2.5
Canada, United Kingdom	2.5
Georgia, North Carolina	1.9
Arizona, California, Idaho	1.8

Previous Use of the Florida National Scenic Trail

Participants were asked how many times they had used the trail they were surveyed at in the past year (Table 9. While over 30% (32.6%) of respondents had hiked that section of the trail 12 times or more, an additional 31.4% were hiking that section for the first time (Table 10.)

Trip Characteristics

Just under half (46.4%) of short survey respondents spent an hour or less on the trail. An additional 34.5% spent "a few hours" hiking or walking the FNST (Table 11). While the majority of respondents did not spend the night on the trail, 7.7% did, staying an average of 3 and a half days (sd=5.05) (Table 12.)

Most of the participants were on the trail with 1 other person (37.2%). Groups of three to five made up 22.4% and groups of six or more made up 12.5% (Table 13.) The most common group types were families (30.2%), alone (28%), and friends (17%) (Table 14.)

Trail Experience and Knowledge on the Florida National Scenic Trail

Short survey respondents were asked to rate their experience on the trail, with 10 being a perfect rating. Almost 50% (47.1%) rated their experience as perfect. An additional 35.9% rated the trip with an eight or nine score, while no respondents rated their experience below a five (Table 15.) Respondents were then asked to explain why their experience on the trail was not a 10. Reasons cited included undesirable weather, lack of wildlife, trail maintenance, and litter (Table 16.)

The last question participants were asked was if they knew they were on part of the FNST, and 75.1% said yes (Table 17.)

Table 9. Short survey respondents' number of visits to the FNST in the past year

FNST visits in the past year	Percent (%)[1]
None	31.4
2-6 times	27.9
7-12 times	8.1
more than 12 times	32.6

[1]n=183

Table 10. Short survey respondents' first site visit

First visit	Percent (%)[1]
Yes	31.9
No	68.1

[1]n=183

Table 11. Short survey respondents' number of previous visits

Length of stay	Percent (%)[1]
1 hour or less	46.4
a few hours	34.5
half a day	10.1
one whole day	1.2
more than 1 day	7.7

[1]n = 183

Table 12. Number of nights spent on the trail by short survey respondents

n	Min	Max	Mean	Std. Dev.
14	2	21	3.5	5.05

Table 13. Short survey respondents' group size

Group size	Percent (%)[1]
1	27.9
2	37.2
3	9.3
4	8.7
5	4.4
More than 5	12.5

[1]n = 183

Table 14. Group type of short survey respondents
[1]n= 183

Type of Group	Percent (%)[1]
Alone	28.0
Spouse/Significant other	9.9
Friends	17
Friends and Family	6
Organized group	7.7
Family	30.2
Other	1.1

Table 17. Short survey respondents' know they are on the FNST

Know if FNST	Percent (%)[1]
Yes	75.1
No	24.9

[1]n = 183

Table 15. Short survey respondents' rating of their experience on the FNST

Rating of FNST	Percent (%)[1]
1	-
2	-
3	-
4	-
5	3.5
6	4.1
7	9.4
8	18.8
9	17.1
10	47.1

[1]n=183

Table 16. Short survey respondents' reason for not rating their experience on the FNST a 10

Reasons not a perfect 10	Percent (%)[1]
Crowding	1.25
High water	1.0
Lack of wildlife	4.0
Litter/trash on trail	2.25
Personal	1.0
Not enough water available	1.5
Trail maintenance & design	3.0
Sharing horse trails	1.75
Undesirable weather conditions	11.65

[1]n= 71

Participants were asked to determine what three activities that best describe the reason that he/ she visited the trail. Participants reported the primary reason was for hiking/walking (79.4%.)

Respondents' second reason cited for visiting the trail was viewing scenery (33.8%.) The third reason most often cited was camping and backpacking (22.3%) (Table 18.)

Table 18. On-site activities that short survey respondents' spent the most time participating in

1st reason	Percent(%)[1]	2nd reason	Percent (%)[1]	3rd reason	Percent (%)
Hiking/Walking	79.4	View Scenery	33.8	Camping, Backpacking	22.3
		Exercise, Jog/Run	15.5	Birding, Nature Study, Look for Wildlife	20.5

[1]n=183

Improvements

Visitors were asked to identify any improvements they would like to see on the trail. The majority of short survey participants (55.2%) stated no improvements were needed on the trail (Table 19.) The trail improvement most often suggested were more blazes and other general trail maintenance (13.5%) A list of improvements suggested is found in Appendix x.

Table 19. Improvements to the trail mentioned by short survey respondents

Other improvements	Percent (%)[1]
Leave as is/No improvements	55.2
Trail Maintenance and blazes	13.5
On-site facilities and amenities	13.1
Other	18.2

[1]n=183

Long Survey Results

Sixty-nine participants returned the long mail-back survey. The site with the highest percent of returned surveys (36.4%) was from Little Big Econ State Forest (Figure 2).

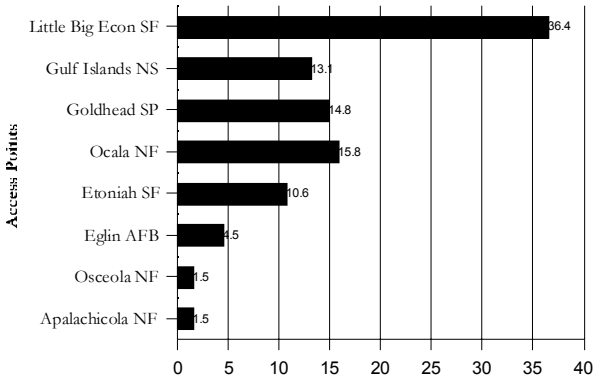

Figure 2. Distribution of long surveys

Socio-Demographic Characteristics

Unlike the short survey, almost one-third (29.0%) of respondents were 60 years old or older (Table 20). Over half (59.4%) of were male (Table 21.)

The long survey provided more extensive socio-demographic information (i.e., race, education) than the short survey. Almost all (95.6%) of the respondents were white (Table 22.) The only other ethnic group represented was Hispanic/Latino. Almost all respondents had some level of college background (91%), while over one-quarter (28.4%) had a graduate degree or above (Table 23.)

Just over three quarters of survey respondents were married (76.1%), more than half responded that they had no children living at home (55.2%) (Tables 24 and 25.) The majority of respondents work full-time outside the home (65.2%) and make a household income of $50,000 or more annually (Tables 26 and 27.)

Table 20. Long survey respondents' age range

Age	Percent (%)[1]
18-29	8.7
30-39 years	10.1
40-49 years	26.1
50-59 years	26.1
60 years and older	29.0

[1]n =69

Table 21. Long survey respondents' gender

Gender	Percent (%)[1]
Male	59.4
Female	40.6

[1]n =69

Table 22. Long survey respondents' ethnic background

Ethnic group	Percent (%)[1]
Black or African America	-
Asian or Pacific Islander	-
American Indian or Alaska Native	-
Hispanic or Latino	4.4
White	95.6
Other	-

[1]n =69

Table 23. Long survey respondents' education level

Highest level of education	Percent (%)[1]
Some high school	-
High school graduate or GED	9.0
Some college or vocational school	22.4
College or vocational trade school graduate	31.3
Some graduate school	9.0
Graduate school degree or beyond	28.4

[1]n =69

Table 24. Long survey respondents' marital status

Marital Status	Percent (%)[1]
	76.1
Single Married	11.9
Divorced	9.0
Widowed	3.0

[1]n =67

Table 25. Long survey respondents' number of children in the household

Children in household	Percent (%)[1]
0	55.2
1	20.9
2	17.9
More than 2	6.0

[1]n =67

Table 26. Long survey respondents' current employment

Employment	Percent (%)[1]
Full-time outside home	65.2
Part-time outside home	-
Unemployed	3.0
Full-time homemaker	7.6
Retired	21.2
Student	3.0

[1]n =66

Table 27. Long survey respondents' annual household income

Household income	Percent (%)[1]
Less than $10,000	1.7
$10,000 to $19,999	8.5
$20,000 to $29,999	13.6
$30,000 to $39,999	6.8
$40,000 to $49,999	11.9
$50,000 to $59,999	8.5
$60,000 to $69,999	6.8
$70,000 to $79,999	11.9
$80,000 to $89,999	5.1
$90,000 to $99,999	8.5
$100,000 or more	16.9

[1]n =59

Past Experience on the FNST

Respondents were frequent visitors to the FNST, with over 70% (71.0%) of respondents returning to the trail more than once (Table 28) and almost half (48.9%) of respondents had visited the trail more than 8 times in the past year (Table 29.)

Long survey respondents were asked how they learned about the Florida National Scenic Trail. One-quarter of respondents learned about the trail from their friends and family, and an equal amount (11.9%) learned about the trail from either roadside signs or a newspaper article (Table 30.)

Table 28. Long survey respondents' first site visit

First visit	Percent (%)[1]
Yes	29.0
No	71.0

[1]n=69

Table 29. Long survey respondents' number of visits to the FNST in the past year

Previous site visits in past year	Percent (%)[1]
Just one other time	10.6
2-6 times	29.8
7-12 times	10.6
More than 8 times	48.9

[1]n=69

Table 30. Media used by long survey respondents to learn about FNST

Media used to learn about site	Percent (%)[1]
friends or family	25.4
magazine	1.5
roadside signs	11.9
guidebook	6.0
brochure	3.0
newspaper article	11.9
don't remember	16.4
other	23.9

[1]n=67

Trip Characteristics

Similar to the results of the short survey, most respondents used the same exit and entrance point. The majority of respondents (72.5%) reported that their visit to the recreation area was not specifically because it was Florida National Scenic Trail. The reasons for visiting the trail most often cited were close to home, exercise, and explore the area (Table 31.)

Over 80% (87.9%) of respondents were day-use visitors, while 12.1% spent more than a day on the trail (Table 32.) Of visitors that spent more than one day on the trail, half of respondents (50.0%) spent the night in a tent next to the trail (table 33.) Over 50% (52.5%) of respondents hiked three to five miles on the trail (table 34.)

Table 31. Long survey respondents' chose trail because it was FNST

Chose trail because FNST	Percent (%)[1]
Yes	27.5
No	72.5
If FNST not the primary reason:	**Percent (%)[1]**
Close to home	33.3
Exercise	24.6
Explore	17.4
Other	24.7

[1]n =69

Table 32. Long survey respondents' length of stay on FNST

Time spent	Percent (%)[1]
less than ½ day	71.2
½ or whole day	16.7
more than 1 day	12.1

[1]n=66

Table 33. Location long survey respondents stayed when overnight on the FNST

Location	Percent (%)[1]
campground off the trail	12.5
tent next to trail	50.0
campsite along the trail	37.5

[1]n=8

Table 34. Long survey respondents' total miles hiked

Total miles hiked	Percent (%)[1]
0-2 miles	16.5
3-5 miles	52.5
6-8 miles	16.5
9-10 miles	7.5
11-20 miles	4.5
21 or more	3.0

[1]n =67

Hiking Experience and Florida Trail Association

Of the participants that filled out long surveys, just over half (54.4%) had hiked a different section of the FNST than the one at which they were surveyed (Table 35.)

Long survey participants were asked to rate their hiking experience level, on a scale of 1 (novice) to 5 (expert.) Close to half (40.6%) rated themselves as a level 3, while an additional 37.7% rated as a level 4 (Table 36.) Almost one quarter (24.6%) of respondents subscribe to a hiking magazine, while just over one-quarter (27.5%) belong to a hiking or outdoor club (Table 37 and 38.)

Almost half (46.4%) of survey respondents were familiar with the Florida Trail Association (Table 39), and 14.7% of those surveyed were members of the Florida Trail Association (Table 40.) Of respondents that were members of FTA, half had been members for five years or less, and half had been members for six or more years (Table 41.)

Table 35. Long survey respondents who visited other sections of the FNST

Visited other sections of FNST	Percent (%)[1]
Yes	54.4
No	45.6

[1]n = 68

Table 36. Long survey respondents' level of hiking experience

Level of hiking experience	Percent (%)[1]
1	4.3
2	11.6
3	40.6
4	37.7
5	5.8

[1]n=69

Table 37. Long survey respondents who subscribe to a hiking/outdoor magazine

Subscribe to magazine	Percent (%)[1]
Yes	24.6
No	75.5

[1]n = 69

Table 38. Long survey respondents who belong to a hiking or outdoor club

Belong to hiking/outdoor club	Percent (%)[1]
Yes	27.5
No	72.5

[1]n=69

Table 39. Long survey respondents familiar with Florida Trail Association

Familiar with FTA	Percent (%)[1]
Yes	46.4
No	53.6

[1]n = 69

Table 40. Long survey respondents that are members of the Florida Trail Association

Member of FTA	Percent (%)[1]
Yes	14.7
No	85.3

[1]n = 68

Table 41. Number of years long survey respondents who belong to the Florida Trail Association have been members

Length of membership	Percent (%)[1]
1 year or less	20.0
2-5 years	30.0
6-10 years	10.0
More than 10 years	40.0

[1]n = 10

Table 42. Long survey respondents' motivations for visit to Florida National Scenic Trail

Motivations[1]	n	Not at all important (%)	Not very important (%)	Important (%)	Very important (%)	Most important (%)	Mean	Std. Dev.
Enjoy nature	68	-	-	17.6	29.4	52.9	4.35	1.46
Promote physical fitness	67		-	13.4	47.8	38.8	4.25	.68
Escape noise/crowds	66	1.5	4.5	33.3	31.8	28.8	3.82	.96
Reduce tensions and stress from everyday life	68	4.4	7.4	29.4	32.4	26.5	3.69	1.08
Explore the area and natural environment	68	5.9	10.3	33.8	19.1	30.9	3.59	1.20
Learn about the natural environment of the area	68	5.9	16.2	29.4	36.8	11.8	3.32	1.07
Challenge myself and achieve personal goals	67	3.0	25.4	34.3	17.9	19.4	3.25	1.13
Be with friends and family	67	22.4	9.0	17.9	23.9	26.9	3.24	1.51
Be in an area where I feel secure and safe	67	17.9	10.4	32.8	19.4	19.4	3.12	1.34
Engage in personal/spiritual reflection	68	11.8	20.6	39.7	16.2	11.8	2.96	1.15
Strengthen family kinship	67	26.9	19.4	16.4	20.9	16.4	2.81	.77
Feel a sense of independence	67	10.4	22.4	47.8	14.9	4.5	2.81	.97
Depend on my skills and abilities	67	10.4	37.3	31.3	14.9	6.0	2.69	1.05
Learn about history and culture of the area	64	.9	16.2	29.4	36.8	11.8	2.38	1.09
Meet new people	67	34.3	29.9	22.4	10.4	3.0	2.18	1.11
Take risks	67	49.3	37.3	6.0	6.0	1.5	1.73	.93

Likert Scale 1= Not at all important...5= Most important

Hiker Motivations

Participants were given a list of motivations and were asked to rate the importance of each motivation as a reason for coming to the hiking trail. Respondents ranked 9 of the 16 motivations as important motivations for their visit to the FNST. Over 85% (86.6%) of respondents ranked *promote physical fitness* (mean=4.25, sd=.68) as either very or most important. At least 60% of respondents ranked *enjoy nature* (mean=4.35, sd=1.46), and *escape noise and crowds* (mean=3.82, sd=.96) as very or most important. Alternately, *learn about the history and culture of the area* (mean=2.38, sd=1.09), *meet new people* (mean=2.18, sd=1.11), and *take risks* (mean=1.73, sd=.93) ranked low on the list (Table 42.)

Conclusions and Management Implication

The first year of the study served as an exploratory year, to find the most effective methods to create the visitor estimate.

Visitor Counts

The final FNST pedestrian estimate of 173,138 is based on visitor counts, researcher observations, and registration cards (Eglin Air Force Base). It represents the best estimate over the 12 month period beginning June 2003 and ending May 2004. The results of the first year of visitor counts and use estimates for the FNST is much lower than had previously been expected. The principal reason for the large difference between initially high estimates of FNST users and the estimate in this report can largely be attributed to the exclusion of all non-hikers in current estimates. For example, the original estimate for Lake Okeechobee counted 3-5 million visitors, when in reality that number represents the number of people who visit the site, whether to boat, fish, picnic, bike, or possibly to walk or hike. The number generated by this research is not a static number; it will change each year as new survey sites are included and accurate numbers for each site are estimated.

Visitor Surveys

Since the FNST passes through both rural and urban areas creates a diverse group of users, often with a variety of expectations use the area. The visitor surveys help begin to identify the types of visitors coming to the FNST, their activities, and their motivations for walking/hiking on the FNST.

FNST Visitors: Who they are

In general, survey results indicate that the typical respondent is a white male, married, with no children living at home. His combined household income is over $50,000 annually, and has a college degree. He usually hikes with his spouse, and they visit the trail regularly, with their primary motivation being for exercise and to experience nature.

This study shows that the FNST caters to a rather homogeneous clientele. Over 70% of hikers are older than 40 and married. Over 80% of hikers are from Florida, and over 90% are White. These results are not atypical of other outdoor recreation sites, but due to Florida's diverse population and the urban locations, the FNST travels close to, it appears there are many different population groups who do not currently use the trail.

Year Two Efforts

The biggest change for year two is a shift from generating counts from a combination of observations and mechanical counters, to all counts coming from mechanical counters. This has been put into effect starting June 1, 2004 and will eliminate unnecessary survey blocks during the week when hikers were rarely seen.

Counter Complications

One recurring problem that was experienced during Year One research was with the electronic eye pedestrian counters. In some locations (Apalachicola NF, in particular) highly irregular counts were recorded, and in such a way that it was evident the counts could not be attributed to hikers. Examples include unusually high counts late at night (which are discarded per protocol) but more complicated to evaluate are unusual counts during the day. In theory, when the data is analyzed, researchers should be able to observe when hikers walked by the counter, then in the hours following, when they hiked out. What is being observed is data that does not correlate, which leads researchers to believe the electronic eyes, on occasion, counts something other than people. In addition to irregular counts with the electronic eye, personal observation supports the idea that unusual counts are occurring. For example, at ANF, a location where only one hiker was seen throughout all of Year One research the mechanical counters contained thousands of hits.

Looking to the Future

The design of this research project is for the pedestrian estimate to become more accurate as each year new data is added. We will continue to refine how we count visitors, but based on the lower expected estimate of users and homogenous population, which currently uses the FNST, we suggest research begin to address non-users of the FNST. Based on who UF researchers have identified use the trail, we will work with the USFS and FTA to identify a market analysis to better understand how to target non-users of the trail. A proposal will be developed January, 2005.

Appendix I
Preliminary Findings:
Estimated Visitor Use

Estimating Visitor Use of the Florida National Scenic Trail

March 2003

Introduction

There is a need for government agencies to consistently collect long-term recreation use data (Loomis, 2000). Access to accurate and reliable information about the number and type of visitors using recreation opportunities on public natural areas is an important way for land management agencies to assess the impacts of visitors, prioritize research and funding efforts, identify and provide for visitor and community benefits, and communicate resource needs to policy makers (Lynch, Vogt, Cindrity, & Nelson, 2002; Mowen ,2002). However, obtaining accurate visitor numbers is oftentimes a difficult and time consuming endeavor. There are a number of ways to collect visitor use information. The type of mechanism used to count and the frequency of collection depend largely on the resources (e.g., staff, money) available, as well as the study objective. Oftentimes, management agencies in charge of trail use or similar dispersed recreation opportunities rely on observational counts or "best guesses" to estimate the amount of use dispersed recreation receives.

Like other long-distance trails and dispersed recreation activities, the Florida National Scenic Trail (FNST) faces numerous obstacles to obtaining accurate visitor numbers. Currently, there exists no systematic means of collecting visitor use information. The amount and type of visitor use data collected varies between the different management agencies as well as within the volunteer efforts. Furthermore, there is no protocol in place for handling any data that is collected.

To help develop an approach to collecting visitor use data, researchers from the School of Forest Resources at the University of Florida are working with the U.S. Forest Service to initiate a visitor assessment of the Florida National Scenic Trail (FNST). To begin the assessment, researchers conducted a thorough literature review of methods for monitoring visitor use for dispersed recreation. Researchers also worked with all relevant management agencies along the FNST to ascertain the extent of their monitoring efforts.

Keeping Track of Visitors

Numbers on the FNST

Currently, visitor use estimates range from _____ to over x million users. This wide range reflects some of the variables related to counting visitors on the FNST. Currently, there is no way of separating many of the uses that occur. For example, although we know that Gulf Shore Islands, National Seashore received 2,450,528 visitors to the Ft. Pickens and Santa Rosa recreation areas in FY 2001, and due to the location of the FNST, it is likely that the majority of those visitors walked on the FNST, we currently have no way of knowing exactly what percentage were on the FNST, or purposefully walked the FNST. Working with the USFS staff and FTA, these are issues researchers are attempting to resolve.

Plan of Attack

Initial efforts have been made to design a standardized kiosk and registration system along the FNST. A prototype of the kiosk and registration form will be presented at the FTA Annual Conference. Furthermore,

Current Situation

The following table outlines the counting mechanisms currently in place along the different sections of the FNST. Multiple counting techniques may be employed. For example, if an area has a vehicle counter, but no way of breaking down the numbers, management staff often estimate the percentage of overall hiking use the section received. In which case, both "Observation" and "Vehicle Counters" would be identified as counting mechanisms for the section.

Section[A]	Counting Techniques						Use Estimate	Notes
	Counters		Registration		Permit	Observation		
	Vehicle	Pedestrian	FTA	Agency				
Seashore • Ft. Pickens • Santa Rosa			X	X[B]			5,000 – 2,472,463	Park manager's estimate was 5,000 hikers. Total use to Ft. Pickens and Santa Rosa were 2,472,463 visitors in 2002
Eglin			X		X		300	FTA section leader estimate
Choctawathcee							6	Total number of 2002 thru hikers
Pinelog • Pinelog State Forest						X	250	DOF state forester estimate
Ecofina Creek							6	Total number of 2002 thru hikers
Chipola							6	Total number of 2002 thru hikers

Section[A]	Counting Techniques						Use Estimate	Notes
	Counters		Registration		Permit	Observation		
Apalachicola National Forest				X		X	400 - 1000	Estimate derived from FTA section leader and USFS staff
	Vehicle	Pedestrian	FTA	Agency				
St. Marks NWR			X	X[B]			399	Derived from NWR staff
St. Marks Rail-Trail		X					239,445	Rail-trail users – counters located at north end of rail-trail
Aucilla WMA			X			X	350	FTA section leader estimate
Foley						X	6	Total number of 2002 thru hikers
Ecofina River						X	6	Total number of 2002 thru hikers
Ellaville • Twin Rivers State Forest			X			X	450	DOF state forester estimate
Suwannee River State Park			X	X[B]			500 – 1000	FTA section leader estimate
Osceola				X		X	Unknown	Registration not regularly maintained by USFS staff
Olustee						X	50 –100	FTA section leader estimate
Gold Head Branch State Park				X[B]			14,052	DEP staff best guess – 35% of total park visitors

Section[A]	Counting Techniques					Use Estimate	Notes
	Counters		Registration	Permit	Observation		
	Vehicle	Pedestrian	FTA	Agency			
Rice Creek/Etoniah State Forest			X			X	50 - 620	Sign-in log at Etoniah Creek SF indicates 50 in past year. FTA section leader estimates 620 including both Etoniah and Rice Creek
Ocala National Forest		X	X				10,000	Based on counter estimates at forest
Cassia (Seminole State Forest)			X	X[C]		X	679	Permits issued only for those using forest roads (driving in)
Little Big Econ State Forest				X[C]		X	12,000	Sign-in sheets at trailhead (40% compliance rate)
Cross Seminole Trail		X					Unknown	Counters not yet functional
Tosohatchee State Preserve				X[C]			1,630	Sign-in sheets at main entrance (30-40% compliance rate)
Seminole Ranch							10-15/year	FTA estimate
Deseret					X		23	Number of permits issued by FTA in 2002

Section[A]	Counting Techniques						Use Estimate	Notes
	Counters		Registration		Permit	Observation		
Bull Creek WMA			X	X[B]			266	Sign-in sheets at manned check station

	Vehicle	Pedestrian	FTA	Agency				
Cross Florida Greenway	X		X				108,140 – 270,350	Estimates of data collected from vehicle counters on site – only recently installed. Figures are adjusted for estimated year. Visitor data is overall use, not categorized by type of use
Withlacoochee State Forest • Citurs • Croom • Richloam			X	X[B,C]			12,961	Sign-in sheets at trailheads collected by DOF
Withlacoochee State Rail-Trail		X				X	19,707 – 131,381	DEP estimates 15% of 131,381 users are walkers/hikers on the trail
Green Swamp East/West			X	X			351	Total number of permits issued
Reedy Creek							6	Total number of 2002 thru hikers

Section[A]	Counting Techniques						Use Estimate	Notes
	Counters		Registration		Permit	Observation		
Upper Kissimmee							6	Total number of 2002 thru hikers
Three Lakes WMA			X	X[C]			50 – 1200	Low estimate is from FTA section leader, 1200 is total number of non-consumptive users visiting WMA

	Vehicle	Pedestrian	FTA	Agency				
Kissimmee River				X[C]			29 - 60	29 is total number of permits given by Avon, 60 includes FTA section leader estimate for hikers on whole section
Highlands Okeechobee			X	X[C]			3000	FTA SL estimate
Lake O	X						1,345,212 – 5,380,849	Low estimate is ¼ of all users visiting site in FY 2001
Seminole			X				19	FTA issued 19 permits in 2002
Big Cypress			X		X[D]		1761	Number of hikers registering at Oasis Visitor Center

[A]For clarity, the section name refers to the particular public area the majority of the trail crosses through
[B]Manned fee station; [C]Iron ranger; [D]Voluntary permit

Appendix II
Five-Year Schedule

Year 1

Gulf Islands National Seashore (H)
Goldhead Branch State Park (H)
Ocala National Forest (H)
Eglin Air Force Base (M)
Apalachicola National Forest (M)
Osceola National Forest (M)
Little Big Econ State Forest (H)
Includes Cross Seminole Trail (Multi-Use Trail)
Etoniah Creek State Forest (L)

Year 2

Suwannee (H)
Lake Okeechobee (M)
Seminole State Forest (M)
St. Marks National Wildlife Refuge (M)
Includes St. Marks Rail Trail
Aucilla River WMA (L)
Pine Log State Forest (L)
Rice Creek (L)

Year 3

Tosohatchee State Preserve (H)
Withlacoochee State Forest (H)
Twin Rivers State Forest (M)
Green Swamp East (L)
Green Swamp West (L)
Big Cypress National Preserve (H)

Year 4

Blackwater River State Forest (H)
Highlands (H)
Bull Creek WMA (L)
Greenway (H)
Kissimmee River/Avon AFB (L)
Three Lakes WMA (L)

Year 5

Wrap up

Appendix III
Year One Access Points

Surveyed Access Points

Ocala National Forest

1. Clearwater
2. Grassy Pond
3. State Road 19
4. Hopkins Prairie
5. Juniper Springs Recreation Area

Apalachicola National Forest

1. Forest Road 150
2. Sopchoppy

Osceola National Forest

1. Battlefield
2. Turkey Road
3. Ocean Pond

Little Big Econ

1. Barr Street
2. Black Hammock
3. Cross Seminole Trail

Gulf Islands National Seashore

1. Langdon
2. Santa Rosa
3. Fort Pickens
4. Pensacola Beach

Eglin

1. State Road 331
2. State Road 285
3. State Road 85
4. Alaqua
5. Buck Pond

Goldhead State Park

1. Mill Site
2. Entrance

Etoniah

1. LL. Pine
2. Holloway

Appendix IV
Summer 2003 Survey Dates

Summer 2003 Survey Sessions

Section	Number of Times Surveyed	Survey Dates
Gulf Islands National Seashore	3	Wednesday 8/13/03 Sunday 6/29/03 Saturday 9/6/03
Eglin Air Force Base	3	Monday 6/30/03 Saturday 6/28/03 Sunday 9/7/03
Apalachicola National Forest	3	Monday 8/4/03 Sunday 7/27/03 Sunday 9/14/03
Osceola National Forest	3	Wednesday 6/25/03 Sunday 8/31/03 Friday 9/12/03
Goldhead State Park	3	Monday 6/2/03 Sunday 8/10/03 Saturday 9/13/03
Etoniah Creek State Forest	2	Monday 7/7/03 Saturday 8/30/03
Little Big Econ	3	Tuesday 7/1/03 Saturday 8/2/03 Friday 8/15/03
Ocala National Forest	3	Tuesday 9/30/03 Friday 9/5/03 Fri 9/26/03

Appendix V
Fall/Spring Survey Dates
2003-2004

Fall/Spring Survey Times 2003-2004

Section	Number of Times Surveyed	Survey Dates
Little Big Econ	10	Saturday 10/11/03 Sunday 11/23/03 Saturday 12/13/03 Saturday 1/10/04 Sunday 1/25/04 Monday 1/26/04 Friday 3/12/04 Saturday 3/27/04 Sunday 5/9/04 Wednesday 5/19/04
Gulf Islands National Seashore	9	Friday 10/24/03 Wednesday 11/19/03 Saturday 11/29/03 Sunday 1/4/04 Tuesday 2/3/04 Friday 2/13/04 Saturday 3/20/04 Sunday 4/11/04 Saturday 5/22/04
Ocala National Forest	10	Friday 10/17/03 Thursday 10/30/03 Saturday 11/8/03 Sunday 12/7/03 Friday 1/16/04 Saturday 2/7/04 Wednesday 2/18/04 Sunday 3/14/04 Friday 5/7/04 Saturday 5/15/04
Goldhead State Park	10	Friday 10/31/03 Saturday 12/6/03 Sunday 12/14/3 Wednesday 1/7/04 Friday 1/9/04 Saturday 3/13/04 Sunday 3/28/04 Friday 4/23/04 Tuesday 5/4/04 Saturday 5/22/04

Section	Number of Times Surveyed	Survey Dates and Time Periods
Osceola National Forest	5	Tuesday 10/28/03 Friday 11/7/03 Saturday 1/17/04 Sunday 3/7/04 Saturday 5/8/04
Eglin Air Force Base	5	Saturday 11/1/03 Sunday 12/28/03 Wednesday 1/21/04 Friday 2/27/04 Sunday 5/16/04
Apalachicola National Forest	5	Sunday 10/26/03 Saturday 1/3/04 Tuesday 1/20/04 Saturday 4/3/04 Friday 5/21/04
Etoniah Creek State Forest	3	Friday 11/14/03 Wednesday 2/25/04 Saturday 4/24/04

Appendix VI
Observation Log

Surveyor:_____

Date:_____

Time:_____

Site:_____

Access Point:_____

Notes (include weather and where you sat):

Time	Number in Group	Gender (#males/females)	Activity	Direction Heading	Starting Point	Ending Point	Notes

Appendix VII
Counter Locations

Counter Locations

1. Goldhead Branch State Park (eye)

2. Little Big Econ State Forest (eye)

3. Apalachicola National Forest
   - Sopchoppy (eye)
   - FR 150 (eye)

4. Osceola National Forest
   - Olustee Battlefield (pad)
   - Turkey Run (pad)

5. Ocala National Forest
   - Juniper Springs Recreation Area (pad)
   - Grassy Pond (pad)
   - Clearwater Lake (pad)

6. Eglin Air Force Base
   - Buck Pond – SR 87 (pad)
   - SR 85 (pad)
   - Alaqua – Bob Sikes Rd. (pad)

7. Etoniah Creek State Forest (pad)

Appendix VIII
Counter Calibration Logs

Pressure Pad Calibration Summary Sheet

Surveyor_____

Counter Name_____

Date_____

Calibration Start and Stop Time_____

File Name of Downloaded Data_____

Total number of *registered counts*_____

Total number of *actual counts*_____

Hikers_____ Surveyor_____

Difference, if any, of registered vs. actual counts_____
(+ if overcounting, or – if undercounting)

Notes:

Infrared Counter Calibration Summary Sheet

Surveyor_____

Counter Name_____

Date_____

Calibration Start and Stop Time_____

Reset Time_____

Total hours_____

Counter number at start of calibration_____

Counter number at end of calibration_____

Total number of *registered counts*_____

Total number of *actual counts*_____

Hikers____ Surveyor_____

Difference, if any, of registered vs. actual counts_____
(+ if overcounting, or - if undercounting)

Notes:

Appendix IX
Registration Cards

FNST Hiker Registration Card

Part 1: Read hiker regulations and requirements posted at trailhead before completing card. (Please print)

Name:_____

City:_____State:_____

# of People in Party:_____

Starting Date:_____Ending Date:_____

Cell Phone # (optional)_____

Direction of Travel: North [ ] South [ ] East [ ] West [ ]

Start Point (Trailhead):_____

End Point (Trailhead):_____

Overnight Camping: Yes [ ] No [ ]

If Yes, Campsite:_____

FNST Hiker Registration Card

Part 2: Detach above portion (Part 1) and deposit in trailhead registration box before hiking. Keep this portion with you at all times. Hikers are responsible for knowing and adhering to all Florida National Scenic Trail regulations and requirements. Thank you.

Name:_____

Date:_____

Start Point (Trailhead):_____

ASFRC

FNST Hiker Registration Card

Part 1: Read hiker regulations and requirements posted at trailhead before completing card. (Please print)

Name:_____
State:_____ Zip Code:_____

# of People in Party:_____

Starting Date:_____Ending Date:_____

Direction of Travel: North [ ] South [ ] East [ ] West [ ]

Start Point
(Trailhead):_____

End Point
(Trailhead):_____

Overnight Camping: Yes [ ] No [ ]
If Yes,
Campsite:_____

What other activities are you participating in on the trail?

_____

FNST Hiker Registration Card

Part 2: Detach above portion (Part 1) and deposit in trailhead registration box before hiking. Keep this portion with you. Hikers are responsible for knowing and adhering to all Florida National Scenic Trail regulations and requirements. Thank you.

Name:_____

Date:_____

Start Point (Trailhead):_____

Appendix X
Registration Kiosk Sign Sample

One Person From Each Party

PLEASE REGISTER HERE

When entering this area

Your registration helps managers to:

- Maintain and improve trail and campsites,
- Plan management budgets, and
- Determine number of people using the Trail

Appendix XI
On-Site Questionnaire

Florida National Scenic Trail Visitor Study

Surveyor:_____ **Time:**_____ **Notes:**

Site:_____ **Date:**_____

Access Point:_____ **Survey ID#:**_____

1) Is this your first time on this particular trail?

___Yes ___No **(☞Go to Question 2)**

2) Over the past year, how many times have you used this trail?

___None ___7-12 times

___2-6 times ___More than 12 times (___ # of times)

3) Did you enter and exit the trail at the same location?

___Yes ___No **(☞Go to Question 4)**

4) If no, where did you enter and exit the trail

Enter_____

Exit_____

5) From the following list of activities, please rank three activities you and your group spent the most time doing while on the trail (1=most time . . . 3=3rd most amount of time spent on activity)

____Hiking
____Walking
____Viewing scenery
____Fishing
____Jogging/Running
____Picnicking
____Photography
____Backpacking
____Nature study
____Hunting
____Camping
____Viewing cultural resources
____Other (Please list_____)

6) About how long did you spend on the trail?

_____1hour or less **____Half a day** **____More than 1 day (_____number of days)**

_____A few hours **____One whole day**

7) Including yourself, how many people are you here with? _____number of people (___#males, ___#females)

8) What type of group are you traveling with?_____

9) On a scale of 1 to 10, 10 being a perfect experience, how would you rate your experience on this trail? _____ score

10) If you did not rate your trial experience as a 10, can you explain why not?

_____

11) Are there any improvements you would like to see on the trail? _____

12) Did you know you were on the Florida National Scenic Trail? _____ Yes _____ No

9

13) What year were you born? 19_____

14) Gender ____Male ____ Female

15)Name_____ **16) Address**_____

City_____ **State** _____ **Zip Code** _____ **Country** _____

Appendix XII
Mail-back Questionnaire

UNIVERSITY OF
FLORIDA

IFAS

SFRC **School of Forest Resources & Conservation**

118 Newins-Ziegler Hall
PO Box 110410
Gainesville, FL 32611-0410
www.sfrc.ufl.edu

Dear Participant,

The University of Florida School of Forest Resources and Conservation and the United States Forest Service are conducting a survey to learn more about your hiking experience on the Florida National Scenic Trail. Only a small number of people have been chosen to participate in this study; therefore, ***your response is very important***.

Your participation is voluntary, but we sincerely hope that you will help us with this project. You are not required to answer any question that you do not wish to answer, and there are no risks to you from participating in this study. ***Your answers will be kept entirely confidential to the extent provided by law.***

Your responses will be very helpful in assessing the current and future needs of visitors to the Florida National Scenic Trail. Providing input about your hiking knowledge, experiences, and motivations will help the United States Forest Service better manage the National Florida Scenic Trail; therefore, we urge you to complete this questionnaire and return it as soon as possible. The total time needed to complete the survey should be approximately 15 minutes.

Please be assured that all of your responses will be confidential. We will not release information which could identify individuals that participate in the survey. The identification number on the questionnaire will be used only to verify the questionnaire's return. You will receive no compensation for completing the survey and your return of the survey will be interpreted as consent for participating in the study. If you have any questions about your rights concerning the study, please feel free to contact the UFIRB office, Box 112250, University of Florida, Gainesville, FL 32611-2250.

When completed, please put your questionnaire in the enclosed postage paid envelope. If you have any questions about this survey, please call (352) 846-0860 or email tstein@ufl.edu

Your input is important to the United States Forest Service. It is important that we hear from you by _____ so your input can be added to the study.

Thank you for your help!

Sincerely,

Taylor V. Stein
Assistant Professor

Florida National Scenic Trail Visitor Study

You were recently contacted by an interviewer while hiking the Florida National Scenic Trail. This survey is designed to find out more about your hiking experience. Sharing your opinions will help the US Forest Service and the Florida Trail Association better plan for your needs. As you fill out this survey, **please think about the visit when you were interviewed by our researcher**. Thanks for your help!

Section 1: Trip Characteristics

1. Please write down the name of the trail you hiked on the day you were contacted by our researcher.
   Name of trail_____

2. Did you enter and exit the trail at the same location?
   - ‘ Yes
   - ‘ No K If No, please list your entrance and exit points.

     Entrance_____

     Exit_____

3. Other than this trip, had you hiked the trail you were on before?
   - ‘ Yes
   - ‘ No

   K If Yes, how many times in the past year have you hiked it?
   - ‘ Just one other time
   - ‘ 2-6 times
   - ‘ 7-12 times
   - ‘ More than 12 times

4. On this trip, approximately how many miles did you hike?

   _____Miles

   _____Can’t remember

5. On this trip, how much time did you spend hiking?
   - ‘ Less than ½ a day K Please continue to Section 2
   - ‘ ½ or a whole day K Please continue to Section 2
   - ‘ More than 1 day K Please continue to Question 6

6. If you hiked for more than 1 day, how many days did you spend hiking?_____

7. If you hiked for more than 1 day, where did you stay overnight?

- ‘ At a nearby hotel/condo
- ‘ At a campground off of the trail
- ‘ In a tent along the trail
- ‘ In an established group campground along the trail
- ‘ In a nearby residence of friends or family

8. If you stayed overnight, were you a....

- ‘ Through hiker (hiking the length of the Florida National Scenic Trail in one calendar year)
- ‘ Section hiker (hiking sections of the Florida National Scenic Trail with the intent of hiking the entire trail over an extended period of time)
- ‘ Neither

Section 2: Hiking Experience

1. Do you belong to any hiking/outdoor clubs?
   - ‘ Yes
   - ‘ No

2. Do you subscribe to any hiking/outdoor magazines?
   - ‘ Yes
   - ‘ No

3. Please rate your level of hiking experience on the following scale (circle one number).

1	2	3	4	5
Novice				Expert

4. People go to particular areas and hike or walk for any number of reasons. Listed below are some possible reasons you might have had for hiking or walking on the trail. Please indicate how important each of the following motivations were as reasons for your hike or walk.

Motivations	Not at all important	Not very important	Important	Very important	Most Important
1. Learn about history and culture of the area	1	2	3	4	5
2. Promote physical fitness	1	2	3	4	5
3. Reduce tensions and stress from everyday	1	2	3	4	5
4. Escape noise/crowds	1	2	3	4	5
5. Learn about the natural environment of the	1	2	3	4	5
6. Be with friends and family	1	2	3	4	5
7. Feel a sense of independence	1	2	3	4	5
8. Take risks	1	2	3	4	5
9. Engage in personal/spiritual reflection	1	2	3	4	5
10. Explore the area and natural environment	1	2	3	4	5
11. Challenge myself and achieve personal	1	2	3	4	5
12. Depend on my skills and abilities	1	2	3	4	5
13. Enjoy nature	1	2	3	4	5
14. Strengthen family kinship	1	2	3	4	5
15. Be in an area where I feel secure and safe	1	2	3	4	5
16. Meet new people	1	2	3	4	5

Section 3: Florida National Scenic Trail

1. Did you specifically choose the trail you were hiking because it was part of the Florida National Scenic Trail?

‘ Yes

‘ No K If No, what was your primary reason for taking your trip?_____

2. How did you first learn about the Florida National Scenic Trail?

- ‘ Friends or family
- ‘ Website, please specify _____
- ‘ Travel agent
- ‘ Magazine, please specify_____
- ‘ Roadside signs
- ‘ Guidebook
- ‘ Brochure
- ‘ Newspaper article
- ‘ Don’t remember, not sure
- ‘ Other, please specify_____

3. Other than the trail you were hiking the day our researchers contacted you, have you hiked any other sections along the Florida National Scenic Trail?

- ‘ Yes
- ‘ No

K If Yes, please name the section(s)_____

4. In a typical year, how often do you hike. . .

	Number of Times		Total Miles
	Per week	Per month	Total miles hiked per year
The Florida National Scenic Trail	_____	_____	_____
Other trails in Florida	_____	_____	_____
Other trails outside of Florida	_____	_____	_____

5. Are you familiar with the Florida Trail Association?

- ‘ Yes
- ‘ No

K If Yes, how did you learn about the Florida Trail Association? (Check all that apply)

- ‘ Friends or family
- ‘ Website, please specify_____
- ‘ Travel agent
- ‘ Magazine, please specify_____
- ‘ Roadside signs
- ‘ Newspaper article
- ‘ Guidebook
- ‘ Brochure
- ‘ Don’t remember, not sure
- □ Other, please specify_____

.

6. Are you a member of the Florida Trail Association?
   - ‘ Yes
   - ‘ No

K If Yes, how long have you been a member of the Association?
   - ‘ 1 year or less
   - ‘ 2-5 years
   - ‘ 6-10 years
   - ‘ More than 10 years

Section 4: Participant Information

We would like to ask a few questions about you, your background, and your past experiences. This information will be used for statistical analysis only, and all information will remain strictly confidential.

1. What is your gender?
   - ‘ Male
   - ‘ Female

2. What year were you born? 19____

3. Which of the following best describes your marital status?
   - ‘ Married
   - ‘ Single
   - ‘ Divorced
   - ‘ Widowed

4. How many children reside in your household? _____

5. What is the highest level of education you have completed? (Please mark one)
   - ‘ Eighth Grade or less
   - ‘ Some High School
   - ‘ High School Graduate or GED
   - ‘ Some College
   - ‘ College Graduate
   - ‘ Some Graduate School
   - ‘ Graduate Degree or beyond

6. Are you presently...
   - ‘ Employed outside the home
     - ‘ Full-time
     - ‘ Part-time
       Occupation:_____
   - ‘ Unemployed
   - ‘ Full-time homemaker
   - ‘ Retired
     Previous Occupation:_____
   - ‘ Student
     - ‘ Full-time
     - ‘ Part-time

7. In what race or ethnic group would you place yourself?
   - ‘ African American
   - ‘ Hispanic or Latino
   - ‘ Native Hawaiian or other Pacific Islander
   - ‘ American Indian or Alaskan Native
   - ‘ Asian American
   - ‘ White

8. What was your approximate total household income, before taxes, in 2002?
   - ‘ Less than $10,000
   - ‘ $10,000 to $19,999
   - ‘ $20,000 to $29,999
   - ‘ $30,000 to $39,999
   - ‘ $40,000 to $49,999
   - ‘ $50,000 to $59,999
   - ‘ $60,000 to $69,999
   - ‘ $70,000 to $79,999
   - ‘ $80,000 to $89,999
   - ‘ $90,000 to $99,999
   - ‘ $100,000 or More

If you have any questions or comments, please write them in the space below.

Thank you for your help with this study!

Please staple or tape the completed questionnaire so that the return address is visible.

Dr. Taylor Stein
University of Florida School of Forest Resources and Conservation
PO Box 110410
Gainesville, FL 32611-0410
Telephone: (352) 846-0860
Web Site: http://www.sfrc.ufl.edu

Appendix XIII
Protocol for Analyzing Counter Data

Analyzing Mechanical Pedestrian Counter Data

Step One: Adjusting Raw Data

Pressure Pad -

Delete individual counts:

1. One hour after sunset to one hour before sunrise
2. Within the same second of each other
3. Unusually high number of counts, with no explanation from FTA or other group, and unusual patterns of high numbers
4. Any data that is our researchers calibrating or working on trail

Infrared Eye –

Delete whole hour's data:

1. One hour after sunset to one hour before sunrise
2. Unusually high count, with no explanation from FTA or other group, and unusual patterns of high numbers
3. Any data that is our researchers calibrating or working on trail

Step Two: Adjusted Data By Month

Counter data should be analyzed by the month, so each month within a season will have a total number of counts. If days are missing data within the month, estimate the missing data by:

First, use the following formula to get an average # of hits per day (make sure you are using adjusted data in calculations):

$$\frac{\text{(Total \# of hits for } x \text{ days before missing data) + (Total \# of hits for } x \text{ days after missing data)}}{2(x \text{ days})}$$

Then, multiply the average hits per day by the number of days missing. This will give you a total # of hits for the period of missing data. If the period covers more than one month, divide the # of missing days by month, and then multiply the number of missing days in one month by the average hits per day. This will allow you to find total # of hits for missing days by month. Make some notation (* or [1]) that the month contains some estimated data.

Step Three: Corrected Monthly Count

In order to better estimate the actual number of users, each access point with a counter will have an average correction factor that will multiplied by the access point's monthly total. Every counter is calibrated regularly, and correction factors are produced by dividing the actual number of counts by the registered number of counts. The average correction factor accounts for every time the access point was calibrated since installation

(not just a season's calibrations). If a counter has to be replaced, correction factors are averaged as normal, unless there are known differences between the counters or conditions. Outlying correction factors can be omitted if the cause of the unusually high/low factor is known.

Step Four: Final Monthly Data

To account for same entry and exit locations, an access point's corrected monthly count is divided by two.

Step Five: Final Seasonal Data

Seasonal data for an access point is determined by adding all final monthly data within the season together.

Appendix XIV
Protocol for Classifying Access Points

Classifying Access Points within a Site

Some study sites may have multiple access points onto the trail. Throughout the study year, researchers get to know all the FNST access points within a particular site. At access points where researchers don't count or observe directly, they take notes on signs of use. This is done by driving by and making note of the number of cars in a parking lot, talking to site managers, and talking with other hikers about other sections of the trail that they enjoy using. Towards the end of the study year when the access points are best understood, all access points are classified as a Type A, B, C, D, or E. These numbers are based on pedestrian traffic, during the spring/fall season, and are just to give an idea of use.

- Type A – Very high use, well known access point, 500 users/month or more

- Type B – High use, between 100-499 users/month
- Type C – Medium high use, between 50-99 users/month
- Type D – Medium low use, between 15-49 users/month.
- Type E – Low use, trailhead or road crossing with really low numbers, 15 users/ month or less

Next, all access points are group with mechanical counters by access point type, regardless of site location. Researchers then average the final monthly counts by access point to determine an average monthly count for access point type x. Outliers are removed (with known reason i.e. holiday or event) before finding averages. Every year, average new access point type data with existing data to continuously improve the classification averages.

All type x access points without counter data are given type x access point's average monthly count for corresponding months.

Finally, add all access points within a site together to get the site's monthly, seasonal, or yearly count.

Appendix XV
Tables for Long Survey Results on Leave No Trace Ethics

"Leave No Trace" Ethics and Skills

Questions regarding Leave No Trace practices were divided into five skills that apply to day hikers (some only apply to campers/backpackers): Plan Ahead and Prepare, Travel and Camp on Durable Surfaces, Dispose of Waste Properly, Leave What You Find, and Respect Wildlife. Participants then answered questions based on their behavior on the trail and their knowledge of Leave No Trace skills.

Behavior

Plan and Prepare

Before leaving on my hike I…	Percent (%)[1]
Left food in package	36.2
Repackaged some food	17.0
Repackaged most food	27.7
N/A	19.1

n=47

Before leaving on my hike I…	Percent (%)[1]
Did not clean any equipment	40.0
Stomped mud off boots at trailhead	14.5
Cleaned boots and pack at home	32.7
N/A	12.7

n=55

Before leaving on my hike I…	Percent (%)[1]
Had no knowledge of area wildlife and sensitive times	33.9
Was somewhat aware of area wildlife and sensitive times	42.4
Was well aware of area wildlife and sensitive times	20.3
N/A	3.4

n=59

Travel and Camp on Durable Surface

When hiking on the FNST I…	Percent (%)[1]
Sometimes stay on the designated trail	10.2
Repackaged some food	17.0
Repackaged most food	27.7
N/A	19.1

n=59

When hiking through a muddy part of the FNST I…	Percent (%)[1]
Walked around the mud not on a path	5.8
Walked around the mud on a side path	59.8
Continued on the trail	30.8
N/A	3.8

n=52

When conditions made it necessary to leave the FNST I walked, sat, stood on…	Percent (%)[1]
Bare soil	67.3
Grasses	16.3
N/A	3.8

n=49

While hiking on the FNST I…	Percent (%)[1]
Find interesting side trails to hike on	20.0
Follow the orange blazes	72.7
N/A	7.3

n=55

Dispose of Waste Properly

When hiking on the FNST I…	Percent (%)[1]
Packed out all trash	94.3
Burned my trash	1.9
N/A	3.8

n=53

When I saw a small piece of trash on the FNST I…	Percent (%)[1]
Left it there	42.9
Moved it off trail	1.8
Picked it up and packed it out	50.0
N/A	5.4

n=56

Leave what you Find

When hiking on the FNST I…	Percent (%)[1]
Kept one souvenir	6.7
Didn't keep anything	93.3

n=60

When I saw flowers on the FNST I…	Percent (%)[1]
Only picked one flower	5.5
Took a picture and did not pick any flowers	76.4
N/A	19.1

n=55

Encountering Wildlife

When encountering wildlife on the FNST I…	Percent (%)[1]
Quietly approached the animal	22.6
Slowly passed by the animal	73.6
N/A	3.8

n=53

Knowledge

The correct answer has been italicized.

Plan and Prepare

When planning your food supply you should…	Percent (%)[1]
Leave food in original package	13.8
Take only fresh food	1.7
Minimize smells by ensuring food is in airtight cans or bottles	43.1
Repack dried/freeze dried food into lightweight plastic bags	*41.1*

n=58

Practice that helps minimize spread of exotic species…	Percent (%)[1]
Clean all hiking equipment	100.0

n=60

Travel and Camp on Durable Surfaces

When hiking on high use trails the best practice is to…	Percent (%)[1]
Walk around puddles/downed trees	6.7
Travel on visitor created shortcuts	1.7
Always use pre-existing trails	*91.7*

n=60

Which of the following is NOT a durable surface to rest, etc on…	Percent (%)[1]
Dry grasses	35.6
Sand or gravel	12.6
Rock outcrops	19.8
Grassy meadows	*32.0*

n =58

Staying on the trail is advisable in high use areas because…	Percent (%)[1]
Traveling off trail is dangerous	5.0
It helps protect the surrounding area	*93.3*
Traveling off trail spreads exotics	1.7

n =60

Which type of vegetation will most likely resist/recover from human trampling…	Percent (%)[1]
Forbs (erect stemmed, broad leaved plants)	*7.1*
Tree seedlings	3.6
Mosses	14.3
Grasses	75.0

n=56

Dispose of Waste Properly

The only waste acceptable to leave in the backcountry is…	Percent (%)[1]
Human waste	*39.7*
Orange peels	39.7
Burned garbage	17.2
Toilet paper	3.4

n=58

When hiking on a trail you should…	Percent (%)[1]
Bury/burn waste	12.2
Pack out only non-biodegradable	17.3
Pick up after those before you	*70.5*

n =60

Leave What You Find

The primary argument for leaving a deer antler in stead of taking it is…	Percent (%)[1]
To avoid disturbing fragile ecosystems	12.5
To allow others to enjoy the object	*41.1*
So its nutrients can return to the soil	39.3
So scientists can learn about deer behavior	7.1

n = 56

When hiking on a trail with beautiful flowers you should…	Percent (%)[1]
Never pick flowers	*96.7*
Pick only dry, wilted flowers	3.3

n = 60

Encountering Wildlife

Of the learned responses that wildlife exhibit, which is LEAST desirable…	**Percent (%)[1]**
Avoidance	3.7
Attraction	*77.4*
Fear	15.2
Indifference	3.7

n =62

Wildlife are LEAST sensitive to disturbances from recreationists…	**Percent (%)[1]**
During nesting season	2.0
When raising young	3.7
In late summer	*29.9*
In winter	64.1

n = 62

Appendix XVI
Individual Site Characteristics

Apalachicola
National Forest

Surveys given:

- 1 short survey
    - Sopchoppy

Age:

- 1 male 60 or older

Use of the FNST within the past year

- 2-6 times

Reason for using the FNST

- Hiking/walking

Type of group the individual traveled with

- Alone

FNST improvements:

- The trail could be better maintained, however the individual thought that the lack of maintenance was a seasonal issue

FNST knowledge

- User knew the trail was FNST

Eglin Air Force Base

Surveys given:

- 3 short surveys
    - Buck Pond/Hey 87
    - Alaqua/Bob Sikes Rd, SR85

Age

- 66.7% 40-49 years old
- 33.3% 50-59 years old

The number of times the user had been on the trail in the past year

- 33% were using the FNST for the first time
- 66.6% had use the FNST 2-6 times before

The main reasons for using the FNST

- Hiking/Walking
- Backpack
- View Scenery
- Camp

Length of time spent on the FNST

- 33.3% spent "half a day" of the FNST
- 66.7% spent more then one day on the FNST
    - 100% spent 2 days on the FNST

Average group size

- 8.2 people

Type of group the individual was traveling with

- 66.7% were with an organized group
- 33.3% were with a group of friends

FNST rating

- The average rating on a scale of 1-10 was a 7

Suggested Improvements

- More blazes
- More designated trailside campgrounds

FNST knowledge

- All groups knew they were on the FNST

Etoniah Creek State Forest

Surveys given:

- 7 short surveys
    - 4 (57.1%) Long Leaf/Tinsley
    - 3 (42.9%) Holloway Rd

Age

- 16.7% 18-29 years old
- 33.3% 50-59 years old
- 50% 60 years or older

The number of times the user had been on the trail in the past year

- 57.1% were using the trail for the first time
- 42.9% used the trail 2-6 times before
- 14.3% used the trail 7-12 times before

Main reasons for using the trail

- Hiking/walking
- Backpack
- View scenery
- Picnic
- Birding

Time spent on the trail

- 42.9% spent "a few hours" on the trail
- 28.6% spent half a day
- 14.3% spent a whole day
- 14.3% spent more than one day
    - 1 person spent 21 days along the FNST

Average group size

- 5.4 people
- Male: female ratio was approx 3:1

Type of group the individual was traveling with

- 71.4% were with an organized group
    - i.e. Boy Scouts or FTA

FNST rating:

- Average trail rating on a scale of 1-10 was 8

Suggested improvements

- fix messy blazes
- add more blazes (especially where trail is relocated due to fire damage)
- get trail off horse trail (too much soft sand)

Knowledge of the FNST

- 100% surveyed knew trail was FNST

Goldhead Branch State Park

Surveys given:

- 31 short surveys
    - 9.7% at Front Entrance
    - 90.3% at Mill Site

Ages:

- 33.3% 40-49
- 25% 50-59
- 20.8% 30-39

The number of times the user had been on the trail in the past year

- 64.5% were on the FNST for the first time
- 25.9% used the FNST 2-6 times before
- 3.7% used the trail more than 12 times before

Reasons that people used the trail included

- Hike/walk
- View scenery
- Picnic
- Nature study
- Jog/run
- Photography
- Camp
- Exercise
- Birding

The length of time that each user spent on the trail

- 60% spent "a few hours" on the trail
- 30% spent "1 hour or less"
- 10% spent "half a day"

Average group size

- 5.5 people

Type of group the individual was traveling with

- 41.9% surveyed were with a family group

FNST rating:

- Average trail rating on scale of 1-10 was 8.9
- Main reasons for the experience not being a 10 included:
    - The trail was to crowded
    - There needed to be more wildlife

Suggested improvements

- more blazes
- rules need to be posted
- trail maintenance
- trashcans
- bathroom

Knowledge of the FNST

- 74.2% knew they were on FNST

Gulf Islands National Seashore

Surveys given:

- 31 short surveys
  - 38.7% at Ft. Pickens
  - 29% at Pensacola Beach
  - 9.4% at Santa Rosa Beach
  - 12.9% at Langdon Pavilion

Ages

- 45% over 60
- 25%40-49
- 20% 50-59
- 5% 30-39
- 5% 18-29

The number of times the user had been on the trail in the past year

- 25% were hiking the FNST for the first time
- 32.1% had hiked 2-6 times before
- 32.1% had hiked more than 12 times

Main reasons for being on the trail

- Hiking/walking
- View scenery
- Birding
- Shell collecting
- Painting
- Nature study
- Bike
- Exercise
- Photography

The length of time that each user spent on the trail varied

- 71.0% spent "1 hour or less" on the trail
- 25.8% spent "a few hours"
- 3.2% spent "half a day"

Average group size

- 2.4 people

Type of group the individual was with

- 40% surveyed were hiking with a family group
- 26.7% were hiking alone

FNST rating and suggested improvements:

- Average trail rating on a scale of 1-10 was 8.8
- Main reasons for a users experience not being a 10 included
  - Chilly weather
  - Less bird activity than normal

Suggested improvements

- Continue path from Langdon to Pensacola Beach
- Set up interpretation stations between Ft. Pickens and Langdon along trail regarding water drainage
- Loose gravel

Knowledge of the FNST

- 66.7% knew they were on FNST

Little Big Econ State Forest

Surveys given:

- 78 short surveys
    - 51.3% Black Hammock/Cross Seminole Trail
    - 48.7% Barr St

Ages

- 36.1% 50-59
- 21.3% 30-39
- 19.7% 18-29

The number of times the user had been on the trail in the past year

- 87.2% surveyed were on trail for their first time
- 50% had hiked more than 12 times
    - 58.6% walked on the trail once a week or more.

Main reasons for being on the trail included

- Hiking/walking
- Fishing
- Jogging/running
- Photography
- Backpack
- Camp
- Birding
- Biking
- View scenery
- Picnic
- Nature study
- Roller blade

The length of time that each user spent on the trail

- 50.7% spent "1 hour or less" on the trail
- 33.3% spent "a few hours or less"

Average group

- 2.4 people

The types of groups users traveled with

- 34.6% were hiking alone
- 30.8% were hiking with family
- 20.5% were hiking with friends

FNST rating

- Average trail rating on a scale of 1-10 was 9
- Main reasons why a users experience was not rated a 10 included
    - Too hot
    - Too cold
    - Broken glass by river
    - to crowded
    - Lack of nature/wildlife
    - Too much trash
    - Trail was

Suggested improvements on the FNST

- Building bathroom facilities at Barr Street
- Installing more water fountains
- Bikers should be allowed on trail
- Bikers are ruining trail (illegal riding)
- Better signs
- Better patrolled by rangers
- Extend Black Hammock Trail
- Improve blazes at Barr Street
- Rebuild bridge
- Build restrooms at Oviedo end of Black Hammock Trail
- Put benches at Barr Street
- Build fitness stations at Black Hammock

Knowledge of the FNST

73.1 % new they were on the FNST

Ocala NF

Surveys given:

- 29 short surveys
    - 58.6% Clearwater
    - 20.7% Juniper
    - 17.2% SR 19
    - 3.4% Hopkins Prairie

Age

- 39.1% 50-59
- 21.7% 30-39
- 17.4% 40-49
- 17.4% 60 and over

Use of the trail within the past year

- 57.1% had hiked trail before
- 25% had hiked trail more than 12 times.

Main reasons for using the trail

- Hiking/walking
- View scenery
- Jogging/running
- Backpack
- Camp
- View cultural resources
- Photography
- Nature study
- Birding
- Exercise
- Hunt
- Look for wildlife

Length of time spent on the FNST

- 42.3% spent "1 hour or less" on the trail
- 23.1% spent a few hours
- 15.4% spent more than one day

Type of group the individual was with

- 34.5% were hiking alone
- 17.2% hiked with a significant other, friends, or family

Average trail rating

- On a scale of 1-10 was 8.6
- Reasons for the experience not being a 10 included
    - a lack of wildlife
    - no water for drinking
    - no trail maps

Suggested Improvements

- Add distance markers when returning to trailhead and add signs to mark cross roads at Clearwater
- More blazes for Clearwater and SR19
- Build restrooms at Clearwater trailhead
- Eliminate clear cutting at the trails edge; creating a buffer zone
- Install kiosks at Hopkins Prairie
- Better trail maintenance

Knowledge of FNST

- 78.6% knew they were on FNST

Osceola NF

Surveys given:

- 3 short surveys
    - 33.3 % Turkey Run
    - 66.7 % Battlefield

Age

- 1 person was between 50-59 years old
- 1 person was 60 or over

Use of the FNST within the past year

- 1 person had never hiked the FNST before
- 1 person had hiked this section of the trail more then 12 times

Length of time spent of the FNST

- 1 person spent less than an hour on the trial
- 1 person spent half a day on the trail

Main reasons for using the trail

- Hiking/walking
- View scenery
- Nature study

Average group size

- 1.6 people

Type of group the individual was with

- 33.3% traveled alone
- 33.3% traveled with a significant other
- 33.3% traveled with family

FNST rating

- On scale of 1-10 was 7
- Reasons why their experience was not a 10
    - "Nature of trail" (being part of a road) at Battlefield

Knowledge of the FNST

- 100% knew they were on FNST